UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/703,502	10/31/2000	Majid Anwar	PCK-001.01	2961

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EXAMINER
ROSWELL, MICHAEL

ART UNIT	PAPER NUMBER
2173	10

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.		Applicant(s)
Office Action Summary	09/703,502		ANWAR, MAJID
	Examiner		Art Unit
	Michael Roswell		2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _01 April 2002_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-12_ is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-12_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _31 October 2000_ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☒ All   b)☐ Some *   c)☐ None of:

        1.☒ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
     Paper No(s)/Mail Date __ℬ__.

4) ☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 3-7, and 10-11 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3, 5, 6, 8, 9, 4, and 11, respectively, of copending Application No. 09/835,484. Although the conflicting claims are not identical, they are not patentably distinct from each other because the main elements of the conflicting claims are not sufficiently different in function.

For example, claim 1 describes a digital document processing system comprising of an adaptable front end for receiving an input stream of source data; an interpreting module for interpreting the input stream to generate an internal representation; and a rendering engine for generating an output stream to a display. Claim 1 of copending Application No. 09/835,484 describes a digital document processing system comprising

of an application dispatcher for receiving an input bytestream of source data; a

document agent for interpreting the bytestream and parsing it into an internal

representation; and a core document engine for mapping the internal representation to

a location on a display.

Claims 3, 4, 6, 7, 10, and 11 describe limitations in the exact same or similar

terms as claims 3, 5, 8, 9, 4, and 11 of copending Application No. 09/835,484. For

example, the use of the term "general object" in claim 3 is not significantly different from

the term "document object" in claim 3 of the copending Application.

In regards to claim 5, the general "parsing module adapted to generate and

object and parameter based representation of the image" conflicts with the "parsing and

rendering module adapted to generate an object and parameter based representation of

a specific view" recited in claim 6 of copending Application No. 09/835,484.

This is a provisional obviousness-type double patenting rejection because the

conflicting claims have not in fact been patented.

Drawings

The drawings are objected to because descriptive labels for the boxes in Figures

1-3 have been omitted. Figure 2 does not clearly point out the bounds of input module

11, and Figure 3 does not clearly point out the bounds of the system 8. A proposed

drawing correction or corrected drawings are required in reply to the Office action to

avoid abandonment of the application. The objection to the drawings will not be held in

abeyance.

Specification

The disclosure is objected to because of the following informalities: the brief

description of Figure 3 contains the phrase "such as the system depicted in Fig. 3". The

specification and claims contain the use of idiomatic English in the use of the word

"colour". There also exist various spelling and punctuation errors in the specification.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter that the applicant regards as his invention.

Claims 1 and 7-9 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

Claim 1 recites the limitation "said visual display" in the second paragraph.

There is insufficient antecedent basis for this limitation in the claim.

Claims 7-9 are rejected for multiple antecedent basis problems. However, the

rejection can be overcome by amending the claims to depend on claim 6 instead of

claim 5.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 6, 9-10, and 12 are rejected under 35 U.S.C. 102(e) as being

anticipated by Alam et al (U.S. Patent 6,336,124).

In regards to claim 1, Alam et al show an adaptable front end for receiving an

input stream representing source data in one of a plurality of predetermined data

formats and containing information representative of a visual image (Column 5, Lines

21-34), an interpreting module for interpreting the input stream to generate an internal

representation ("intermediate format") of the visual image (Column 5, Lines 54-57), and

a rendering engine for processing the internal representation and for generating an

output data stream suitable for driving an output device to present the visual image

(Column 2, Lines 11-18).

In regards to claim 6, Alam et al disclose a shape processing module that

receives an object and parameter based representation of a visual image and converts

the representation into a suitable output data format (Column 7, Lines 54-66 and Figure

7).

In regards to claim 9, the pipeline architecture of the shape processing module of Alam et al can be seen in Figures 13 and 14.

In regards to claim 10, the internal representation of Alam et al includes object parameters having dimensional and physical parameters (Column 7, Lines 60-66). It is inherent in the art that temporal parameters are of use in the presentation of on-screen objects. Therefore it would be obvious to include temporal parameters among the information provided by the digital data of Alam et al.

In regards to claim 12, Alam et al teach interactive visual displays generated by the disclosed digital document processing system (Column 6, Lines 63-65), by preserving document links and bookmarks.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alam et al.

In regards to claim 2, Alam et al include a method for monitoring a data stream (Column 5, Lines 21-22) and identify several file formats that are acceptable as input and output (Column 2, Lines 1-11). Although Alam et al do not explicitly describe the

use of DOC, RM, VRML, and SGML file formats, they allow for "formats generated by

text and/or image authoring tools or applications, or any other suitable formats". It is

well known that the aforementioned formats are generated by text and/or image

authoring tools. The examiner takes OFFICIAL NOTICE of these teachings. It would

have been obvious to one of ordinary skill in the art, having the teachings of Alam et al

before him to modify the list of formats accepted by the method for monitoring a data

stream of Alam et al to include DOC, RM, VRML, and SGML file formats.

In regards to claim 7, the shape processing module of Alam et al processes

objects on the basis of a boundary box that defines the boundary of an object, bounds

the actual shape of the object, the content of the object and the transparency of that

object (Column 13, Lines 42-49, Figures 13-15B). Although Alam et al do not explicitly

relate the processing of an object to its transparency value, the processing module

processes objects based on object parameters. It is well known in the art that

transparency is a parameter of an on-screen object. The examiner takes OFFICIAL

NOTICE of these teachings. It would have been obvious to one of ordinary skill in the

art, having the teachings of Alam et al before him to take into account transparency

parameter values when processing an on-screen object.

Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alam

et al and Meltzer et al (U.S. Patent 6,125,391).

In regards to claim 3, Alam et al show an adaptable front end for receiving an

input stream representing source data in one of a plurality of predetermined data

formats and containing information representative of a visual image (Column 5, Lines 21-34), an interpreting module for interpreting the input stream to generate an internal representation ("intermediate format") of the visual image (Column 5, Lines 54-57), and a rendering engine for processing the internal representation and for generating an output data stream suitable for driving an output device to present the visual image (Column 2, Lines 11-18).

Alam et al fail to show the separation of content and structure within its intermediate format, and fail to describe the structure in terms of generic objects and parameters defining specific properties of those generic objects.

Meltzer et al teach a method for processing documents of specific file formats similar to that of Alam et al. Meltzer et al further teach the separation of content and structure within its intermediate format, and describe the structure in terms of generic objects and parameters defining specific properties of those generic objects (Column 26, Lines 19-26), with the content stored in the parsed XML file, and the structure lying within the DTD for the parsed XML file.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Alam et al and Meltzer et al before him at the time of the invention to modify the internal representation of Alam et al to include the separation of content and structure presented by Meltzer et al to obtain a generic internal file format that separates out content and structure, and defines elements of content in terms of an object/parameter model.

It would be advantageous for one to utilize such a combination in order to more simply translate from one file format to another. See Meltzer et al, Column 81, Lines 20-27.

In regards to claim 4, Alam et al show an adaptable front end for receiving an input stream representing source data in one of a plurality of predetermined data formats and containing information representative of a visual image (Column 5, Lines 21-34), an interpreting module for interpreting the input stream to generate an internal representation ("intermediate format") of the visual image (Column 5, Lines 54-57), and a rendering engine for processing the internal representation and for generating an output data stream suitable for driving an output device to present the visual image (Column 2, Lines 11-18).

Alam et al fail to disclose a library of generic objects upon which an internal representation of an input document is based.

Meltzer et al teach a method for processing documents of specific file formats similar to that of Alam et al. Meltzer et al further disclose a library of generic objects upon which an internal representation of an input document is based (Column 3, Lines 11-14).

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Alam et al and Meltzer et al before him at the time of the invention to modify the internal representation of Alam et al to include the library of generic objects

of Meltzer et al to obtain a generic internal representation defined by a library of generic

objects.

It would be advantageous for one to utilize such a combination in order to more

simply translate from one file format to another. See Meltzer et al, Column 81, Lines

20-27.

In regards to claim 5, Alam et al show an adaptable front end for receiving an

input stream representing source data in one of a plurality of predetermined data

formats and containing information representative of a visual image (Column 5, Lines

21-34), an interpreting module for interpreting the input stream to generate an internal

representation ("intermediate format") of the visual image (Column 5, Lines 54-57), and

a rendering engine for processing the internal representation and for generating an

output data stream suitable for driving an output device to present the visual image

(Column 2, Lines 11-18).

Alam et al fail to teach a parsing module for generating an object and parameter

representation of an image.

Meltzer et al teach a method for processing documents of specific file formats

similar to that of Alam et al. Meltzer et al further disclose a parsing module for

generating an object and parameter representation of an image (Column 26, Lines 58-

66).

Therefore, it would have been obvious to one of ordinary skill in the art, having

the teachings of Alam et al and Meltzer et al before him at the time of the invention to

modify the document processing system of Alam et al with the parsing module of

Meltzer et al to obtain a system for receiving an input stream, translating that stream

into an internal representation by way of a parsing module, and generating output data

from the internal representation.

It would be advantageous for one to utilize such a combination in order to more

simply translate from one file format to another. See Meltzer et al, Column 81, Lines

20-27.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alam et al

and Rumph et al (U.S. Patent 6,034, 700).

In regards to claim 6, Alam et al disclose a shape processing module that

receives an object and parameter based representation of a visual image and converts

the representation into a suitable output data format (Column 7, Lines 54-66 and Figure

7).

Alam et al fail to teach the use of gray-scale anti-aliasing to increase the

resolution of displayed objects.

Rumph et al disclose a method useful in any invention where objects are

displayed, such as the digital document processing system of Alam et al. Rumph et al

teach a method for "reducing jaggies" using gray-scale anti-aliasing that greatly

increases the resolution of displayed objects (Column 2, Lines 21-32).

Therefore, it would have been obvious to one of ordinary skill in the art, having

the teachings of Alam et al and Rumph et al before him at the time of the invention to

modify the shape processor of Alam et al with the gray-scale anti-aliasing technique of Rumph et al to obtain a digital document processing system that produces sharper image display.

One would be motivated to make such a combination for the purpose of displaying images at a higher resolution. See Rumph et al, Column 1, Lines 29-30.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alam et al and Harrington (U.S. Patent 5,278,678).

Alam et al show an adaptable front end for receiving an input stream representing source data in one of a plurality of predetermined data formats and containing information representative of a visual image (Column 5, Lines 21-34), an interpreting module for interpreting the input stream to generate an internal representation ("intermediate format") of the visual image (Column 5, Lines 54-57), and a rendering engine for processing the internal representation and for generating an output data stream suitable for driving an output device to present the visual image (Column 2, Lines 11-18).

Alam et al do not teach the use of a chrominance/luminance-based color model to describe color data.

Harrington describes a scheme for rendering "a high quality image on a display with moderate resolution" (Column 4, Lines 69-50), as would be utilized in the digital document processing system of Alam et al. In addition, Harrington further discloses the

use of a chrominance/luminance-based color model to describe color data (Column 3,

Lines 15-20).

Therefore, it would have been obvious to one of ordinary skill in the art, having

the teachings of Alam et al and Harrington in front of him at the time, to modify the

digital document processing system of Alam et al to include the

chrominance/luminance-based color model of Harrington to obtain an output system for

the digital document processor that produces colors described in terms of their

chrominance and luminance values.

One would be motivated to make such a combination to allow for fast color

manipulation, structuring of an image, color correction, and animation effects. See

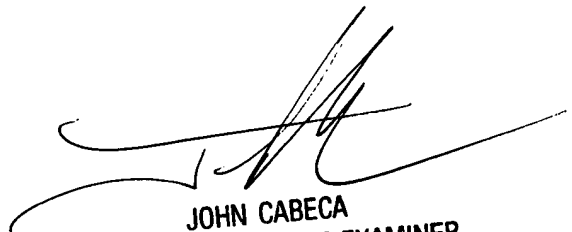Harrington, Column 2, Lines 37-39 and Columns 4-5, Lines 67-68 and 1-6.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Michael Roswell whose telephone number is (703) 305-

5914. The examiner can normally be reached on 8:30 - 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Cabeca can be reached on (703) 308-3116. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Michael Roswell
2/3/2004

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